

*Humanity only has one engineering project, building better engineers than humans. After that, the thing we built can do the engineering.*

Clips have been making the rounds on Twitter from my second Lex about the “bishop guy” in a chess engine, or a “cone guy” in a self driving car. These engineering ideas look ever more ridiculous.

Since the beginning of comma, I wanted to make a machine that could drive cars like a human. Obviously there’s no reference to traffic cones inside human DNA, they learn about them from data. So there shouldn’t be any reference to traffic cones in your codebase.

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Rich Sutton [stated this most iconically](#) in 2019.

*One thing that should be learned from the bitter lesson is the great power of general purpose methods, of methods that continue to scale with increased computation even as the available computation becomes very great. The two methods that seem to scale arbitrarily in this way are search and learning.*

But then where does it stop? Why draw the line at DNA? Evolution is clearly a search and optimization process. Why is hard coding stuff that’s in the human DNA okay, why not evolve a driving agent? Why not evolve life?

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The concept of a [Seed AI](#) is very captivating. Build a minimum viable self improving AI, and allow it to bootstrap its way to human and beyond. This is clearly possible, evolution did it (though with an ungodly amount of compute).

But remember, our goal is just to build something superhuman, not go beyond. Unlike a self driving car, if you were building a train driving agent, learning like a human is probably not the right choice. It’s simple enough to code and test. You should have a `train_signal.py`

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